DOCUMENT RESUME

ED 275 760 TM 860 677

AUTHOR Green, Donald Ross; Langhorst, Beth Hoover
TITLE Passage Dependence and Item Characteristics.
PUB DATE Apr 86
NOTE 18p.; Paper presented at the Annual Meeting of the National Council on Measurement in Education (San Francisco, CA, April 17-20, 1986).
PUB TYPE Speeches/Conference Papers (150) -- Reports - Research/Technical (143)

EDRS PRICE MF01/PC01 Plus Postage.
DESCRIPTORS Achievement Tests; Correlation; Elementary Secondary Education; Grade 3; Grade 6; Grade 10; *Item Analysis; *Reading Comprehension; *Reading Tests; Standardized Tests; *Test Construction; *Test Items
IDENTIFIERS *California Achievement Tests; *Passage Dependency; Point Biserial Correlation

ABSTRACT

The passage dependence of an item refers to the degree to which it is necessary to read the associated passage in order to be able to answer that item correctly. This paper studies the value of obtaining data about passage dependence in the construction of reading comprehension achievement tests. Passage dependence indices were examined in several ways. The reading comprehension tests used were subtests of the newly standardized California Achievement Tests, Form E for levels 13, 16 and 19, (designed for grades 3, 6 and 9-10). Approximately 20 classes for each of the grades were recruited from 12 schools in 5 school districts. Results showed that a high degree of passage dependence is not an essential feature of every item in a valid reading comprehension test. Results suggest that importance of passage dependence to the quality of an item is itself context dependent. Some passage dependence and some passage independence is to be expected in any test of reading comprehension that covers a broad range of objectives. (JAZ)

****
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
****

ED275760

"PERMISSION TO REPRODUCE THIS MATERIAL HAS BEEN GRANTED BY

D. R. Green

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)."

Passage Dependence and Item Characteristics

Donald Ross Green
Beth Hoover Langhorst
CTB/McGraw-Hill

The passage dependence of an item refers to the degree to which it is necessary to read the associated passage in order to be able to answer that item correctly. Passage independence refers to the degree to which the item can be answered correctly when the passage is absent.

Most of the major standardized reading tests used in the schools in this country measure comprehension by presenting the examinee with sets of questions about an accompanying passage. For a number of years it has been common to criticize these tests on the grounds that many of the test questions can be answered without reading the passage (e.g., Preston 1964; Pyrczak 1972; Entin & Klare 1981). These critics have recommended that publishers identify passage independent items and remove them from the test on the grounds that they are flawed and do not measure reading comprehension.

Although some studies have raised doubt about the importance of passage dependence (e.g., Hanna & Oaster 1978; Hanna & Scherich 1981), most writing on the topic maintains that passage dependence is necessary for validity. While it is apparently true that most of the authors and publishers of Reading Comprehension tests attempt to write items that are passage dependent, it also appears that typically they do not examine passage dependence during item tryouts and do not make that quality a criterion for item selection.

Perhaps the reason for this lack of concern is inertia and reliance on tradition. It is also possible that the behavior is rational and represents the conviction that a high degree of passage dependence is not an essential feature of valid reading comprehension measures.

The purpose of this study is to try to assess the value of obtaining data about passage dependence in the construction of Reading Comprehension achievement tests. To that end passage dependence indices are examined in several ways. The matters considered are:

* differences in item statistics as a function of the presence or absence of the passage,
* the relationship of item passage dependence and independence indices to standard item statistics,
* the correlations of passage-present and passage-absent scores,
* differences among the indices of items relating to specific objectives,
* differences in item statistics by objective as a function of the presence or absence of the passage.

U.S. DEPARTMENT OF EDUCATION
Office of Educational Research and Improvement
EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

☒ This document has been reproduced as received from the person or organization originating it.
☐ Minor changes have been made to improve reproduction quality.

• Points of view or opinions stated in this document do not necessarily represent official OERI position or policy.

Instruments Used

The Reading Comprehension tests used for this study were subtests of the newly standardized California Achievement Tests, Form E for Levels 13, 16 and 19 (designed for grades 3, 6 and 9-10). For Levels 16 and 19 each student received a test booklet identical to the CAT/E Standardization version except that there were blank spaces where four of the passages had been. Using this format it was clear to the student which questions were associated with a missing passage.

In order to control for characteristics of individual passages alternate forms were created. For Levels 16 and 19 there were two alternate forms (A & B) made by deleting one set of four passages from A and a different set of four passages from B. The passage sets deleted from each form were matched on length, readability and average standardization item difficulty so that forms A and B were reasonably equivalent. Forms A and B were alternated among students within each class. One passage (5 items) in Level 16 and two passages (7 items) in Level 19 were left in both forms A and B to provide data on any differences between the groups of students receiving forms A and B (Table 1).

The CAT/E standardization version of Level 13 contained only five passages. Forms A and B were created by deleting alternate sets of two passages from each form, again matched to make the forms equally difficult. The fifth passage was deleted from half of Form A and half of Form B; the result was four forms. Six individual questions (not associated with a passage under normal test conditions) were left in all the Level 13 forms to provide information about differences among the four groups. Figure 1 shows the arrangement.

Table 1 shows the number of passages and items in each of the forms. Note that all students took all the items but each student took only one form. Thus all the students saw the common items with the passage present. Each student took half of the remaining items with the passage present and half with the passage absent. For any item the sample consisted of half the students for the passage-present condition and the other half for the passage-absent condition. For example, for item one on Level 16 the passage-present statistics were taken from Form A, the passage-absent statistics from Form B; for item eight the passage-present statistics were taken from Form B, the passage-absent statistics from Form A.

The standard administration directions were supplemented with special instructions informing the students about why the passages were missing, and asking them to answer all the questions even if they did not know what the answer should be. In order to relieve any anxiety this situation might create, the students were assured that this was a test of the test and not a test of themselves.

Method

Approximately twenty classes for each of grades 3, 6 and 10 were initially recruited from twelve different schools, in five school districts. The final sample included 22 classes totalling 480 students in grade 3, 13 classes totalling 339 students in grade 6, and 17 classes totalling 404 students in grade 10. The classes were average, heterogeneous groups averaging 24 students.

Each student in the study sample has a passage-present score and a passage-absent score based on number of items correct for those items administered in each condition. Similarly each item has two sets of statistics, one from the passage-present condition and one from the passage-absent condition.

There are three different dependence indices in common use in the literature. One is the **CDI** (context dependence index) offered by Hanna and Oaster (1978-79). It is the difference (**P-A**) between the mean item difficulty with the passage present (**P**) and the mean with the passage absent (**A**). This appears to be a straightforward measure of passage dependence. The second is the index used by Tuinman (1973-74) (**1-P/A**) which is essentially the same as the **CDI**; the two had correlations of .95, .94, and .96 for the items in Levels 13, 16, and 19 respectively. Consequently this second index will not be used here.

The third index, labelled **CII** (context independence index) by Hanna and Oaster, is the measure of passage independence espoused by Pyrczak (1972). It is the difference (**A-C**) between the mean item difficulty with the passage absent (**A**) and the expected chance score on the item (**C**). Since all the items used in this study had four choices **C** is always 0.25 here.

At first blush the **CDI** and the **CII** may appear to be merely opposite sides of the same coin, but in fact, while they are negatively related they are not entirely redundant. Their correlations for the three sets of data reported here are only -.75, -.71, and -.56 for Levels 13, 16, and 19 respectively. Thus it is useful to examine the two separately.

In order to assess the arguments about the need for those constructing tests to consider passage dependence, the two item indices are examined for the items in each of the three test levels as a whole, by objective within each level, and in relationship to the corresponding item-test correlations (point biserials). Also considered are the passage-present, passage-absent and common item scores for the examinees. The data for each test level are considered separately but the possibility of age/grade level differences is also examined.

Results

Descriptive statistics for the performance of the study participants by form and by level are shown in Table 2 along with the same data for the Spring standardization of CAT/E. Analyses of the items common to the different forms of the test used here revealed no systematic differences in performance (in fact very little difference at all) among the different groups of students taking the different forms indicating similarity of group ability levels.

As expected, the experimental materials are somewhat harder but otherwise quite similar to the standardized test. The reliabilities are somewhat lower than those found in the standardization which is not surprising since half the items in each form lacked the relevant passage.

The basic passage dependence information can be found among the statistics shown in Table 3. First it may be noted that the mean difficulties in the passage-present condition approximate those found in the standardization group (Table 2) at Levels 13 and 16 but are somewhat lower for Level 19.

Next it can be seen that the passage-absent means are all lower than the passage-present means indicating that each test is passage dependent to at least some degree. Correspondingly the mean **CDIs (P-A)** are all positive. Since the mean **CIIs (A-C)** are also above zero it follows that the tests are also passage independent to some degree (i.e. some of the items can be answered without the passage by some of the students). While there was some variation from grade to grade and more variation from item to item, in general the increment in score over chance with the passage present **(P-C)** is about twice that with the passage absent **(A-C)**. In other words a student was about twice as likely to answer the item correctly when the passage was present as when the passage was absent.

These passage dependence statistics are all smaller at Level 19 than they are at the two lower levels.

Table 4 shows the medians for the point biserials (the relationship between the item and the entire test, including passage-present and passage-absent items) in each of the forms at each of the levels. Two things about these data are noteworthy. First, on the average, the point biserial correlations are clearly higher when the passage is present than when it is not. Second, the point biserials found with the passage absent are typically well above zero. The point biserials for the item and just the other passage-present or passage-absent items were also calculated. They were just slightly lower but followed the same patterns of relationships with the other indices as the point biserials reported.

The relationships between the passage dependence indices and the item-test correlations for passage-present and passage-absent conditions are shown in Table 5. There is a statistically significant but quite low correlation between passage independence (CII) and the passage-present item-test correlations for Level 19. However, for Levels 13 and 16 in the passage-present condition the contribution of the item to test reliability is not related to its degree of passage dependence or independence.

In sharp contrast to the passage-present condition, these item statistics are strongly related in the passage-absent condition. In this case the degree to which the item relates to the others in the test is strongly related to both indices, positively to passage independence and negatively to passage dependence. That is to say that the more easily an item can be answered when the passage is absent (and the less the difference in difficulty between the two conditions) the higher the item-test correlation.

The correlations between student scores for passage-present items and passage-absent items are .53, .58 and .68. Analysis of passage dependence indices and item-test relationships by objective and by distractor type can clarify the relationships discussed above and perhaps explain the age/grade related trends.

Analysis by Objectives

The principal objectives measured at each test level are shown in Table 6. The passage dependence statistics for these objectives are displayed in Table 7. The point biserials are the medians for the item-test correlations of the items in each objective. The test is defined as all the items in the form a student took, including common, passage-present and passage-absent items.

Not surprisingly, by far the most dependent items are those concerning Literal Comprehension (i.e., Passage Details). This is consistent across all three levels tested. For Passage Details there is a large decrease in the mean p-values from the passage-present (P) to the passage-absent (A) condition as well as a dramatic decrease in the median item-test correlation, particularly for Levels 16 and 19. When the passage is absent these items do not appear to be measuring a coherent set of skills. In fact, performance is barely above chance levels (CIIs of .16, .13, .12).

Items involving Critical Comprehension (Forms of Writing and Writing Techniques) are not passage dependent as evidenced by the consistently low CDIs across all levels. Items involving the distinction between fantasy and reality, or between statements of fact and opinion (Forms of Writing) are particularly passage independent. In fact, some of the items in this objective actually had higher p-values with the passage absent. This degree of passage independence does not mean, however, that these items do not measure the same general "trait" as do the other items in the test. The item-test correlations remain substantial in both conditions, actually increasing in the passage-absent condition for Level 16.

Writing Techniques is on the whole less independent and slightly more dependent than Forms of Writing. However, the item-test correlations again remain substantial in the passage-absent condition.

There is variability among the objectives that make up Inferential Comprehension. Overall these objectives tend to show passage independence but also show some degree of passage dependence. The CDIs and CIIs vary more from level to level for Inferential Comprehension than for Literal or Critical Comprehension.

Character Analysis is relatively passage independent, particularly in Levels 13 and 16. For Levels 16 and 19 this objective also shows passage dependence.

There is a definite trend of increasing passage independence by increasing level on Central Thought despite, or perhaps because of, the fact that the skills included in this objective become more complex at the higher levels. On all levels Central Thought is about average in passage dependence.

Interpreting Events tends to be close to the mean values on both the passage dependence and independence indices. The exception, a low mean CII for Level 19 is a function of the lower overall passage-present p-values (P) of the items, many of which involve evaluating four complex answer choices.

Discussion

The pragmatic question addressed in this study concerned the value of obtaining data about passage dependence in the construction of reading comprehension tests. The results support the argument that a high degree of passage dependence is not an essential feature of every item in a valid reading comprehension test. Rather, the basic conclusion that can be derived from the results described above is that the importance of passage dependence to the quality of an item is itself context dependent. Taken together the results suggest that some passage dependence and some passage independence is to be expected in any test of reading comprehension that covers a broad range of objectives.

The results described above establish that there is a substantial level of both passage dependence and passage independence in each of these reading comprehension tests. As Hanna and Oaster (1978) have noted passage dependence and passage independence are related but different aspects of an item, not simply reducible to opposite sides of the same coin.

Even though the test shows some degree of passage independence in the special study conditions it does not follow that the way an item functions in the passage-absent condition has a direct bearing on the way that item functions in the passage-present condition. Obviously students did make use of the passage when it was available, as evidenced by overall higher p-values in the passage-present condition. In addition, most items did not discriminate among students when the passage was absent as well as they did when it was present.

Supporting the conclusion that passage dependence is context dependent, is the fact that not only are the CII and the CDI imperfectly correlated overall, but the inverse relationship between dependence and independence tends to occur only for particular objectives; CII and CDI values are not distributed randomly among items. Thus on the one hand the items concerning Passage Detail were found to be very passage dependent and not passage independent and the items requiring distinction between fantasy and reality were very passage independent and not passage dependent. On the

other hand items in certain other objectives such as Interpreting Events could be answered at considerably better than chance level in the passage-absent condition yet showed some passage dependence as well.

In general, Literal Comprehension and Critical Comprehension items were directly opposite types. Literal Comprehension items were the most passage dependent, least independent, and showed very little ability to discriminate among students when the passage was absent. When the passage was absent Critical Comprehension questions were the most amenable to the strategy of looking for logical answers and showed good discrimination among students in both the passage-present and passage-absent condition.

The passage independence of these items does not mean, however, that they do not measure the reading comprehension "trait", as defined by the content covered in this test, as well as the more passage dependent items. The fact that the point biserials remain high in the passage-absent conditions supports the argument that these items appear to be measuring the reasoning abilities underlying more complex reading comprehension skills.

Considering the strength of the correlations between scores on passage-present and passage-absent items it seems reasonable to argue that when the passage is absent the items tend to measure reasoning ability just as reasoning ability is an important factor in the interpretation of incoherent text (Kintsch & Vipond, 1978). Both curriculum guides and current theory (Royer & Cunningham 1981) support the argument that the passage independent skills covered under Inferential and Critical Comprehension are considered part of the general "trait" of reading comprehension.

When the passage is present academic aptitude skills such as reasoning ability enter into performance on all items along with the larger constellation of reading skills of which they are a part. In the passage-present condition there is no relationship between the dependence indices and the item-test correlations. This suggests that, while the passage dependence information is important, the passage dependence and independence indices do not have direct meaning about the quality of the item for normal test construction purposes.

A number of the results appear to show age or grade related differences. Supporting the conclusions of Hanna and Oaster that item difficulty mediates the relationship between dependence and independence, the correlation between CII and CDI decreased as grade level (and test complexity) increased. The mean passage dependence indices for Grade 10 (Level 19) were lower than for Grades 3 and 6. One possible explanation for this grade related difference is that as the items require increasingly complex skills, performance in the passage-absent condition is increasingly a function of general knowledge, reasoning skills, and test wiseness. The fact that this emerges more clearly at Grade 10 than at Grade 6 is consistent with Piagetian data and theory.

Also supporting this view are the data concerning Central Thought which can be interpreted to indicate that as reasoning skills increase the student is better able to select a logical alternative in the absence of the passage context. Consistent with the interpretation of this objective tapping age related increases in reasoning skills are increases in item-test

correlations for the passage-present condition and relatively substantial item-test correlations in the passage-absent condition. In general there were more age related changes among the objectives that make up Inferential Comprehension than for other objectives.

The relationship between item types and passage dependence suggests an interaction between the item complexity acceptable at a given grade level and the amount of passage dependence possible to achieve. It may be difficult to write a relatively simple item which taps inferential reasoning and is at the same time passage dependent. At level 13 items with logical but not passage relevant distractors may be too difficult.

One final but important note concerning the value of gathering passage dependence information needs to be made. Despite the fact that the task of answering reading comprehension questions in the absence of the associated passage was said to be a test of the test and not a test of the students, some students were quite upset and most students were quite frustrated by the experience. There was a great deal more fidgeting and general disruption than in a normal testing situation. The students needed constant encouragement not to skip the questions where the passage was absent. Our experience with this study suggests that would neither be practical nor pleasant to routinely gather passage dependence data.

REFERENCES

Entin, E.B. & Klare, G.B. Components of answers to multiple choice questions on a published reading comprehension test: An application of the Hanna-Oaster approach. Reading Research Quarterly, 1980, 2, 228-236.

Hanna, G.S. & Oaster, T.R. How important is passage dependence in reading comprehension? The Journal of Educational Research, 1978, 71, 345-348.

Hanna, G.S. & Oaster, T.R. Toward a unified theory of context Hanna, G.S. & Oaster, T.R. Toward a unified theory of context dependence. Reading Research Quarterly, 1978-1979, 2, 226-243.

Hanna, G.S. & Scherich, H.H. An empirical evaluation of three definitions of context dependence. Journal of Reading Behavior, 1981, 8, 75-80.

Kintsch, W. & Vipond, D. Reading comprehension and readability in educational practice and psychological theory. In L.G. Nilsson (Ed.), Memory, Processes and Problems. Hillsdale, N.J.: Erlbaum, 1978.

Preston, R.C. Ability of students to identify correct responses before reading. The Journal of Educational Research, 1964, 58, 181-183.

Pyrczak, F. Objective evaluation of the quality of multiple choice items designed to measure comprehension of reading passages. Reading Research Quarterly, 1972, 8, 62-71..

Royer, J.M. & Cunningham, D.J. On the theory and measurement of reading comprehension. Contemporary Educational Psychology, 1981, 6, 187-216.

Tuinman, J.J. Determining the passage dependency of comprehension questions in 5 major tests. Reading Research Quarterly, 1973-1974, 9, 206-223.

FIGURE 1.

Arrangement of Passages Present in Level 13 Reading Comprehension Forms

A 1

Passage	Item No.
1	7 – 11
2	12 – 17

B 1

Passage	Item No.
3	18 – 23
4	24 – 28

A 2

Passage	Item No.
1	7 – 11
2	12 – 17
5	29 – 35

B 2

Passage	Item No.
3	18 – 23
4	24 – 28
5	29 – 35

TABLE 1.

Number of Passages and Items by Condition

FORM:	LEVEL 13 A1	LEVEL 13 A2	LEVEL 13 B1	LEVEL 13 B2	LEVEL 16 A	LEVEL 16 B	LEVEL 19 A	LEVEL 19 B
Passage Present								
No. Passages	2	3	2	3	4	4	4	4
No. Items	11	18	11	18	26	24	24	24
Passage Absent								
No. Passages	3	2	3	2	4	4	4	4
No. Items	18	11	18	11	24	26	24	24
Common								
No. Passages	0	0	0	0	1	1	2	2
No. Items	6	6	6	6	5	5	7	7
Original Test								
No. Passages			5			9		10
No. Items			35			55		55

TABLE 2.

Descriptive Statistics by Level and Form

	N	No. Items	Mean No. Correct	SD	KR-20	SEM	Mean Item Diff.	Mean Common Items
LEVEL 13								
Form A1	124	35	22.6	5.1	.79	2.35	.65	.84
Form A2	115	35	24.1	6.2	.86	2.31	.69	.85
Form B1	117	35	22.5	4.9	.77	2.33	.64	.86
Form B2	118	35	23.1	5.7	.83	2.32	.66	.86
All Forms	474	35	23.1	5.5	.80	2.46	.66	.86
Spr.Std.	6677	35	27.2	6.9	.96	2.07	.78	
LEVEL 16								
Form A	172	55	35.1	10.3	.92	2.99	.64	.70
Form B	163	55	34.0	9.8	.90	3.05	.62	.68
All Forms	335	55	34.6	10.1	.90	3.18	.63	.69
Spr.Std.	7637	55	39.4	12.3	.95	2.78	.72	
LEVEL 19								
Form A	197	55	32.6	9.3	.89	3.07	.59	.85
Form B	203	55	31.5	9.9	.90	3.10	.57	.83
All Forms	400	55	32.0	9.6	.89	3.22	.58	.84
Spr.Std.	3465	55	39.5	10.8	.93	2.78	.72	

TABLE 3.

Passage Dependence Statistics by Level

	LEVEL 13*		LEVEL 16*		LEVEL 19*	
STATISTICS:	Mean	SD	Mean	SD	Mean	SD
P(resent)	.74	.14	.73	.14	.65	.15
A(bsent)	.50	.22	.51	.19	.44	.16
P-C	.49	.17	.48	.14	.40	.15
CII: A-C	.25	.22	.26	.19	.19	.16
CDI: P-A	.24	.17	.22	.17	.21	.16

P = item difficulty passage present condition
A = item difficulty passage absent condition
C = chance (.25)

* Based on 29 items in Level 13, 50 in Level 16, 48 in Level 19. Common items (passage present in both forms) are excluded.

TABLE 4.

Median and Distribution of Point Biserials by Form, Level and Condition

	Passage Present Items			Passage Absent Items			Total
	No. Items	PP+PA Items	PP Items	No. Items	PP+PA Items	PA Items	or Form
LEVEL 13							
Form A1	11	.34	.36	18	.24	.21	.31
Form A2	18	.45	.50	11	.25	.18	.39
Form B1	11	.36	.39	18	.22	.18	.29
Form B2	18	.40	.39	11	.21	.21	.34
All Forms*	29	.39		29	.24		
LEVEL 16							
Form A	26	.43	.44	24	.28	.33	.41
Form B	24	.51	.53	26	.38	.27	.37
All Forms	50	.46		50	.30		
LEVEL 19							
Form A	24	.48	.51	24	.26	.25	.39
Form B	24	.48	.48	24	.27	.30	.39
All Forms	48	.48		48	.27		

* Items common to both forms were not included in **PP** and **PA**.
PP = Passage Present Items
PA = Passage Absent Items
All Forms = Passage Present, Passage Absent and Common Items

TABLE 5.

Correlations among Passage Dependence and Independence Indices and Point Biserials, Passage Present and Passage Absent Conditions

	LEVEL 13		LEVEL 16		LEVEL 19	
	Pt B Passage Present	Pt B Passage Absent	Pt B Passage Present	Pt B Passage Absent	Pt B Passage Present	Pt B Passage Absent
CII: A-C	-.03	.65	-.16	.80	.33	.70
CDI: P-A	.14	-.59	.00	-.73	.00	-.58

TABLE 6.

Objectives and Item Classification for Cat/E
Reading Comprehension

	LEVEL 13 Category	LEVEL 16 Category	LEVEL 19 Category
Literal Comprehension			
Objective 32 Passage Details:	who what where when, sequence	who what when, sequence	who what where when, sequence
Inferential Comprehension			
Objective 35 Character Analysis:	feeling motive trait	feeling motive trait	motive trait
Objective 36 Central Thought	main idea	main idea author purpose author viewpoint tone, mood	main idea author purpose author viewpoint tone, mood
Objective 37 Interpreting Events	conclusion cause, effect predict outcome	conclusion cause, effect predict outcome	conclusion cause, effect predict outcome
Critical Comprehension			
Objective 38 Forms of Writing	reality, fantasy	fact, opinion	fact, opinion, biography, autobiography
Objective 39 Writing Techniques		figurative tech. persuasive tech.	figurative tech. persuasive tech. structural tech.

TABLE 7.

Passage Dependence Indices and Item Statistics by Objective

	# ITEMS	P	A	P-C	CII A-C	CDI P-A	POINT BISERIAL Present	Absent
LEVEL 13								
Literal:								
Passage Details	9	.76	.41	.51	.16	.35	.40	.20
Inferential:								
Character Analysis	5	.72	.59	.48	.34	.14	.37	.35
Central Thought	5	.72	.46	.45	.21	.26	.43	.27
Interpreting Events	8	.70	.50	.45	.25	.25	.40	.25
Critical:								
Forms of Writing	2	.83	.84	.58	.59	-.01	.50	.49
OVERALL MEAN	29	.74	.50	.49	.25	.24	.39	.24
LEVEL 16								
Literal:								
Passage Details	9	.72	.38	.47	.13	.33	.46	.15
Inferential:								
Character Analysis	7	.82	.58	.57	.33	.24	.38	.25
Central Thought	9	.72	.51	.47	.26	.21	.41	.34
Interpreting Events	16	.75	.54	.50	.29	.21	.50	.32
Critical:								
Forms of Writing	3	.72	.66	.47	.41	.07	.47	.56
Writing Techniques	6	.62	.50	.37	.25	.13	.41	.41
OVERALL MEAN	50	.73	.51	.48	.26	.22	.46	.30
LEVEL 19								
Literal:								
Passage Details	6	.74	.37	.49	.12	.37	.52	.01
Inferential:								
Character Analysis	5	.70	.47	.45	.22	.23	.50	.26
Central Thought	5	.73	.53	.48	.28	.20	.53	.33
Interpreting Events	15	.60	.38	.35	.13	.22	.44	.19
Critical:								
Forms of Writing	4	.63	.57	.38	.32	.06	.46	.44
Writing Techniques	13	.63	.45	.38	.20	.18	.46	.37
OVERALL MEAN	48	.65	.44	.40	.19	.21	.48	.27